S5 WRMC
(Over.) Campus Glimpses.
Transcripts, 1934.

Lee, William Starrs
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MSL

CAMPUS GLIMPSES

Middlebury College Broadcasters' Program
January 13 - 1:15 p.m.

Opening Signature (Original Motif from "Gamaliel Painter's Cane" on Chapel Chimes.)

Announcer

We introduce the Middlebury College Broadcasters, the first undergraduate organization in America to have as its sole object the presentation over the air of college days and college ways. We invite you to reenter college for a half hour while we reproduce some of your student moments. We take you back to your classroom, to your fraternity house, to chapel, to your dormitory, and offer a chance for alumni of any college to live again thirty minutes of college life. To men anticipating their college career, we give a sound glimpse into the future. This program is picked up directly from the Middlebury campus.

Over in the Music Studio the Glee Club is working on new songs for the trips through New England and New York. It means hard, hard drill for them months ahead of their scheduled recitals. Professor Harry Owen who has led the Middlebury Club to victories in the New England Intercollegiat Glee Club contests is waving the baton. I believe they are working on The Bellman by Forsyth and you may hear some of their negro folk song specialities too. We move the microphone to the Music Studio.

(The Bellman by Forsyth -- Ditson 3½ min.
Steal Away Negro Folk Song 2½ min.)

Announcer

Presidents in most American Colleges like to keep in touch with as many undergraduate personalities as time affords. Dr. Paul D. Moody at Middlebury particularly likes to have the boys drop in to talk things over. Wally Boehm and Dick Williams, newly elected captains on the New England championship football team, have just stopped in at his office and the three of them are talking generalities on the place of athletics in American colleges. We'll eavesdrop on the group for a minute.

Discussion

Boehm: I think you're right, Dr. Moody, when you say the so-called dangers of keeping athletics in its proper place on the college campus is pretty much exaggerated nowadays. I wonder why?

Prexy: Ask yourself, Wally. You and Dick are co-captains of next year's foot-ball team. After three years of intercollegiate competition, do you find anything particularly biassed in the attitude of players or supporters? How about it, Dick? They are normal, aren't they?

Williams: Sure they are, the one I've played with and against so far. I've noticed one thing, too. Back in prep school, and even before that, when I watched big college football, it seemed to me that all the men were mere mountains -- dumb-looking brutes you wouldn't suppose had gotten through grammar school. Now it seems different --

Prexy: Surely. That's part of the answer, right there. Of course, I understand the technique of all major college sports has changed so that brawn isn't so all-important now as it used to be, and most games are won today by brainy, fast players; but there's another side to it -- that of the faculty and administration viewpoint. It used to be, just as you say, that the typical college athlete was quite the problem child as far as his professor was concerned. In the days when college enrollment, prestige, and ranking depended on athletic records, the player had practically no eligibility requirements. Any 250-pounder, for instance, in one of the old "foot-ball factories", as they were called, could count on passing his courses without the slightest mental ability on his part. But now --

Williams: Now the whole thing has changed, hasn't it? I mean the lineup of an average college team in any sport today doesn't necessarily include the lowest graded students, does it?

Prexy: I should say not! Exactly the opposite is true in recent years. Often the college stars are among the highest on the scholastic rating. You're certainly correct when you say the whole matter is in an utterly different proportion from that which started the vigorous campaigns in magazines and newspapers a few years ago. I'd like to think the American college youth was become a more serious sort -- perhaps even more intellectual than in the past. If that's true, the effects of the depression can be credited with some of it. Whatever the cause, the results are evident in the marked rise of calibre among our athletes in almost every institution.

(MORE)

Athletic Discussion continued -

Boehm: One of the reasons athletic competition has always interested me is the way it helps a fellow live his college life in just about the best way possible. The way I figure it, there are two angles to the thing, nowadays.

Prexy: Just what do you mean, Wally?

Boehm: Here's what I mean, Dr. Moody. You take a chap who is fairly active and normally strong. He's in college, taking, say, fifteen hours a week of lectures and maybe another six hours in special laboratory work. What with outside reading and study, that's a pretty full week, and he's still not using much beside his brain.

Williams: There are plenty who will say amen to that, Wally. What's that old proverb ("All work and no play"!)

Boehm: That's it! One-sided! And what better way is there to round out your time than by a couple hours a day on the football field or the cinder track?

Prexy: I don't think there is, Wally. And more of our students are discovering that every year. Why, right here we have about 87% of the student body who are actively engaged in sports of one kind or another. The rest are physically handicapped, or they feel they just can't find the time, perhaps. Beside the regular intercollegiate athletic program, there is always something doing in intramural sports, in wintersports, handball, badminton -- I could name a dozen activities, during the different seasons right on campus here.

Williams: And that doesn't include the mountain climbing and hiking, does it? There shouldn't be anybody, in college nowadays, who can't find some way of working out in <u>some</u> sport.

Boehm: Right, Dick! That's how it's possible to burn up the extra energies and keep a fellow's mind healthy and active, in the midst of a heavy schedule of courses. I suppose the other side is the one that interests you, Dr. Moody. When it comes to a completely balanced program in the four years at college, that makes for a pretty ideal education, doesn't it?

Prexy: Precisely, gentlemen. It's an ideal for any educator to try to follow -- that of the well-rounded, diversified foundations. We've seen the general character of college athletics take a completely new part in the collegiate program. It's my belief that with a vast majority of the students engaged, throughout the year, in a healthy proportion of exercise, we're arrived at about the best solution possible.

Boehm: "Mens sana in corpore sano" -- is that about it?

(MORE)

Athletic Discussion continued -

Proxy: I am glad to hear you quote Latin. Keep it up! There probably is no better way of expressing it. At any rate, I'm more than pleased with the present position athletics holds in the American college, with the attitude most students have toward it.

Williams: (fade out) Well, sir , I guess that was just about what we wanted to find out. Your average student ------

(end)

Announcer

It sounds as though that discussion would go on for sometime. The proper balance of athletics and scholarship has been under fire for several decades and it will probably continue with added emphasis during the next century. For variety, let's run up to Mead Chapel. Vincent Sargent, undergraduate composer and musician, is finishing up his daily practice period on the chapel organ. He is playing a Pastorale by Stebbins.

(Pastorale) 3 min.

Announcer

We will now turn to a little problem in sociology at one of the fraternity houses. It's the old, old trouble - one of the boys trying to get a date with the aid of an unsympathetic brother. The Scene is laid in one of the third floor rooms and in the telephone booth. The cast is Sleepy Collinder, Peter Rolltree and Alice Brown.

(skit)

Peter: Hey, Sleepy, Sleepy, wake up! I'm in a jam. Ya gotta help me out!

Sleepy: What do you mean, waking a guy up in the middle of the night like this?

Pete: Middle of the night?! It's 1:15 in the afternoon. I gotta get a date for the dance tonight -- just found a buck in my other pair of pants -- and the dance starts in seven hours!

Sleepy: You're not late: never put off 'til tomorrow what you can put off 'til the day after tomorrow.

Pete. This is no time for flippancy, my frau -- I need help!

Sleepy. So, you need help, hey? Wears all my clothes, borrows my dough, drives my car -- and now he needs help! What do I do, take down my hair?

Pete. Come on, snap out of it, stupe! Sumpin's gotta be done.

(MORE)

Skit continued

Sleepy. Okay, okay -- get out the freshman list of women. My system never fails: blindfold yourself, poise a pencil over the names, let it fall, and cursed be he that cries, enough!

Pete. You interest me strangely. 'Tis done!

Sleepy. Ah! The noble knight advanced into the lists -- the bright sun glistened on his armor -- he couched his lance and charged -- let me see what name it fell on.

Pete. Alice Brown.

Sleepy. Now there's a distinctive name for you. She's class president, I think. Where does she live?

Pete. Pearson's Hall, second floor.

Sleepy. Well, call her up and get the date -- Don't stand there with your face hanging out.

Pete. Okay -- lend me a nickel!

Sleepy. What, another? My last! In a noble cause ...! Take the Directory in case you forget the name betwixt times.

(phoning sounds)

Operator. Number please?

Pete. 183, please -- got that nickel, Sleepy? Good!

Operator. Deposit five cents, please.

Pete. Here 'tis, (clink)

Girl. Pearson's hall.

Pete. May I speak to Alice Brown?

Girl. Which one.

Pete. Hey, Sleepy, she wants to know which Alice Brown.

Sleepy. Alice Brown - Alice Brown. (suddenly) The first one. Her class is in the directory.

Pete. (fumbling of pages wildly). The freshman, please -- here she comes -- hello, Alice?

Alice. Hello.

Pete. This is pretty late to be calling up, but would you like to go to the dance tonight?

Alice. Oh, I'd love to -- what time shall I be ready - uh - who is this?

Pete. Ulp - this is Peter Rollstree. You know I almost mixed you with the other Alice Brown. I didn't know there were two. I'm glad <u>you</u> can come.

Alice. So am I. We freshmen think it's pretty nice to go out with Seniors.

Pete. Oh-h. I'll see you at eight o'clock.

(MORE)

(skit continued)

Alice. I'll be ready. (hangs up)

Pete. Sleepy! I got the date with Alice Brown. The Freshman President.

Sleepy. The Freshman, why you poor deluded innocent babe in the wood, she sits in back of me in my psychology, what a girl. Words fail me! Would you like to take a trip to Siberia?

Pete. Is she really that bad?

Sleepy. Worse! She bulges!

Pete. You and your system, you may have the upper hand now, you varlet, but my day will come, my day will come!

(end)

Announcer

Down stairs in the same house the rest of the boys are circled round the piano. No college alumnus can forget the hours he used to spend around that fraternity piano, chanting old drinking songs, college, and fraternal favorites. There's some pretty good harmony today! In fact, rather high class singing for a fraternity. They're now doing Gamaliel Painter's Cane. Let's listen in before we go over to the Chemistry Building.

(Gamaliel Painter's Cane - 2 or 3 verses) 3 min.

(Fraternity members - general conversation - cheers)

Cushing

Let's do Weimar - page 84.

(Weimar) 2½ min.

Announcer

Now we'll make a dash over to the Chemistry Building. They're always working on new gadgets there, making up formulas and concoctions out of new ideas and new experiments. The benches covered with colored bottles, glass tubes, and electrical apparatus are one of the most interesting and exciting places on every campus, especially those in the research laboratories. We'll try Professor Voter's office. He's bound to have something new on exhibition to show. Ted Wilson is just going in there now.

(A Modern Chemical Experiment)

Wilson. Professor Voter, in your freshman lecture this morning, you said that a new way was used to discover the last two chemical elements. If you have time, I'd like to hear more about it.

Voter. Surely. Sit down .... Dr. Allison of Alabama devised an apparatus by which he detected minute traces of these two elements which had not been discovered before and which he named Virginium and Alabamine. The method is based on the effect of different substances in a magnetic field. I think Professor Haller is working on this experiment right now. Let's go down to his dark laboratory and see what he is doing.

(sound of entering lab after slight pause)

Voter. Professor Haller, here's Ted Wilson of my freshman class.

Haller; Hello, Ted.

Wilson. Hello, Professor.

Voter: Ted is interested in your Allison Experiment and would like to have you tell him something about it.

Haller. I'll be very glad to. I'm just about to run some tests now. Come around to this side of the table where you can see better.

Wilson. It looks complicated with all of those wires and lenses and things. -- Do you always work in the dark?

Haller. We must. You see, this is an experimental set-up in which we give molecules a strong electric shock. The shock causes them to turn over. We use a beam of light to measure how long they take to turn over after they are shocked. We keep the room dark so that we can watch the light closely Let's turn it on and you can see it in operation. Don't get too close to the wires. They carry a current at twenty-five thousand volts which

(start sound of the spark)

produces that spark. When this spark occurs, it generates light which can be seen, and a surge of current, both at the same instant.

(stop spark sound).

Then comes a race. The fastest race that will ever be possible. A race between light and electricity. After they are generated by the spark, the two contestants, Light and Current, are trotted out to the starting point, which is the first glass cell that you see on the table. The molecules within the cell are poised! The signal arrives! They jump. Away go the current and the light exactly at the same instant. The light, shooting at a terrific speed which would carry it to the sun in eight minutes, rushes along its course to the second tube several

MORE

(Experiment continued - Haller speaking)

Haller

feet away. It is slightly faster, and the betting is in its favor. The current leaps through those wires overhead faster than lightening, and flashes to the second tube also, trying to reach it before the light does.

Wilson. Why must the current get to the tube before the light?

Haller: Well, this second cell contains the substance which we are investigating. The current gets to the cell, shocks the molecules and makes them turn over. If they have just turned over when the light gets there they will affect the light in such a way that the observer can tell that the race is a tie.

Wilson. Then the race must always result in a tie?

Haller. Yes, since the observer can see when that happens. The molecules of different substances turn over at different speeds and handicap the current different amounts, depending on what the substance is. We have to handicap the light by giving it a longer path to match the current handicap. The change of path required tells us what substances we have by telling us how long their molecules take to turn over.

Wilson. How long does it take for molecules to turn over after you shock them?

Haller. About one billionth of a second. There is no other way to measure such a short time except to see how far light can go while they are turning over.

Wilson. What are you studying in this thing now?

Haller. In a previous experiment ultraviolet light fell on a certain substance and caused a slight chemical change, thereby producing certain new compounds. In order to understand the action of the light I want to find out what the products are, and am using this set-up for that purpose.

Wilson. But why don't you use regular chemical analysis instead of this complicated method?

Haller. The amount of the substance is too small to separate and identify by any other method. If we should dissolve a cupful of sugar in Lake Champlain, we could probably detect it by this method. It is very sensitive.

Wilson. Then you can use this machine on lots of different experiments?

Haller. Oh, yes, indeed. So far the method is new and there are not many set-ups available. Obviously we have designed and constructed our own. It is necessary to have some experience for successful operation. Therefore its possibilities have not yet been fully realized, and it is in the developmental stage. Nevertheless, ores have been rapidly analysed, new elements have been discovered, new isotopes or varieties of elements discovered, and compounds from the whole realm of nature have been examined. It should

MORE

(Experiment continued - Haller speaking)

Haller

be possible someday to analyze delicate complex substances like the spinal fluid. A great advantage is the fact that so little is required and it is left unchanged after the experiment.

Wilson. What does the observer actually see when he is working with the appartus?

Haller. Simply a small spot of blue light in a telescope. He watches the light steadily while he turns a wheel slowly. As he watches, the light suddenly fades and is gone, and quickly reappears. When exactly extinguished the race is a perfect tie. The indicator states the handicap and that spots the substance.

Wilson. This sounds like mighty interesting work. Can students carry on this kind of experiments, Professor Voter?

Voter. Certainly. After your elementary training we can arrange your schedule so that you can take a research course in your senior year. Do you think you'd like it?

Wilson. Would I!

(end)

Announcer

The whole Middlebury College student body wanted to have a part in the first on this series of five broadcasts. They've been assembling for the last ten minutes, and they're going to sing their favorite chapel number Kipling's Recessional.

(Recessional)

(Number of stanzas depends on time. Fade out in last 15 seconds)

Announcer

If there are any college moments alumni would like to have reviewed over the air, or if there are questions on college life that future freshmen would like answered, send your ideas and questions to The Broadcasters, Middlebury College, Vermont, or to your station WGY at Schenectady. The Broadcasters will be on the air again at this same hour next week.

(end)

CAMPUS GLIMPSES

1934

Middlebury College Broadcasters' Program
January 20 - 1:15 p.m.

Opening Signature (Chapel Chimes)

Announcer

The chimes from the Middlebury Chapel again bring to you the College Broadcasters, the first undergraduate organization in America to have as its sole object the presentation over the air of college days and college ways. We invite you to reenter college for a half hour while we reproduce for you some of your student moments. We take you back to your classroom, to your fraternity house, to chapel, to your dormitory, and offer a chance for alumni of any college to live again thirty minutes of college life. To men anticipating their college career we give a glimpse into the future. This program picked up directly from the Middlebury campus introduces every member of the student body,

and is dedicated this week to the New York Alumni Association which meets at the Yale Club next Friday evening.

Announcer

A few weeks ago the whole scientific world was startled by the announcement of Dr. Pease in California that the speed of light which has been considered the most fundamental constant in nature actually fluctuates. This experiment was started at Mount Wilson observatory by Dr. Michelson several years ago and later continued with the use of a mile-long tube at Santa Ana near Pasadena. Following Dr. Michelson's death Dr. Pease continued the work. The subject has just come up in one of Dr. Bryant's physics classes. We will listen in at his laboratory in Warner Science Hall.

Discussion

Student. Professor Bryant, some weeks ago I saw in the New York Times that Professor Michelson spent $60,000 setting up the apparatus for his last measurement of the speed of light. Why did he go to this expense when his results at Mount Wilson agreed so closely with each other?

Bryant. His measurements at Mount Wilson gave the speed through air as 186,242 miles per second, with a probable error of only 2½ miles per second. But when the speed of light is stated, it is the speed outside the air, between the sun and the earth, or the stars and the earth, for example. The air slows down the speed by an amount depending on the barometric pressure, the temperature, and the amount of water vapor in it.

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(Hymn of Thanksgiving
by student body)
Not more than two verses.

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MORE

(Light Waves discussion continued - Bryant speaking)

Bryant. Michelson figured that the air slowed down the speed of light by 42 miles per second, nearly twenty times the probable error of his measurements. No scientist can be satisfied when he is forced to apply a correction so far out of proportion to the precision of his measurements, and especially when the size of the correction is so uncertain as this one.

Student Didn't he measure the barometric pressure, the temperature, and the amount of water vapor?

Bryant. Yes, on the ground at Mount Wilson. But the light travelled twenty two miles to Mount San Antonio and back, across the valley whose floor is thousands of feet below the line of the journey. Air currents were undoubtedly flowing upward or downward above that valley. The pressure may not have differed much from that at Mount Wilson, but the temperature and the amount of water vapor could easily have been quite different. Thus, that correction of forty two miles per second was not based on information assuredly reliable.

Student. How did the latest method diminish these uncertainties?

Bryant. In this latest method he used a mile-long tube from which most of the air was pumped and in which the pressure, temperature, and water vapor could be measured for the whole path. Moreover, this reduced the correction so that it is now less than the probable error instead of being twenty times as large.

Student. The same newspaper stated that the speed of light as measured by this last method seems to be variable. What do you think of that?

Bryant. Anyone would be very reckless if he ventured an explanation of this apparent variation with no more definite information regarding the arrangement of apparatus and the results of the measurements than has yet been published. I earnestly hope Dr. Pease will soon give a complete account of the whole experiment.

Student. But the New York Times I saw seemed to have a fairly detailed description of the set-up.

Bryant. But the description was far from complete. I have seen only two statements regarding the set-up of the apparatusthat were at all complete. Both of them were newspaper accounts, and both optically impossible.

Student. Do you really think, that the speed of light may vary?

Bryant. It will be very difficult for any physicist or astronomer to believe that this speed actually does vary. There must have been some influence which distorted the apparatus.

Student. Just how could any such distortion be produced?

MORE

(Light Waves discussion continued)

Bryant. The published accounts direct one's attention to the sun and moon as the possible culprits, so the natural thing will be to learn all about the tides at Santa Ana during the time of taking the measurements.

Student. Just what tides are you referring to, and how will it be possible to investigate them now, months after the actual measurements on the light are completed?

Bryant The earth is not rigid. The experiment of Michelson and Gale in 1913 on the grounds of the Yerkes Observatory showed that the solid part of the earth rises and falls. It has tides just as does the ocean, only not so high. I am referring to these tides as productive of possible errors. The sensitive timing apparatus and the mirrors at each end of the tube were supported by concrete piers. It may be that the movement of these piers by such tides could cause the variations observed. The United States Coast and Gerditic Survey has a tide-predicting machine which can give complete information for any place in the world and for any time desired.

Student. Just how would they proceed in order to learn whether these tides have affected their measurements?

Bryant. The first thing to do would be to see whether the variations in the measurements are definitely periodic. If they are, and if these periods correspond with the tidal periods, the inference is inevitable that the rise and fall of the earth's crust so disturbed their apparatus as to introduce errors in the timing. If there is no such correspondence, then some other disturbing influence must be sought.

Whether easily found, or not, I am confident that it is there, and that the actual speed of light is as constant as we have always supposed it to be.

(end)

Announcer

Band music fluctuates more according to the season than light waves evidently do. Bands in all colleges are most active in autumn and spring during the big sports seasons but occasionally during the winter the members are suddenly invited to dust off their French horns, limber up their fingers on the trumpet stops, bring the brasses out of hiding for a general rehearsal, lest the old march tunes and college numbers become forgotten. The Middlebury band is having just such an airing this afternoon. They're playing The Rising Eagle by Frank Frank.

(The Rising Eagle by Frank Frank)

Announcer

Director Lekner is starting in on a long harangue on musical values. We'll step away from the rehearsal now and return later.

The bull session is the only college educational feature in which faculty can have no part nor say so. Theories and hunches in everything from racketeering to religion are digested, constructed, destroyed, humored and praised. Most of the meetings open in dormitory rooms about eleven p.m. and close sometime before dawn, but matinee sessions are often held on Saturday. There's one now going on at 25 Hepburn Hall. We don't need to tap on the door, everyone is invited and there is no admission charge. Hazing seems to be the subject.

Discussion

Tom. You can take your own mail down, Dick. I'm not running errands for anybody in this weather.

Dick. There you are, Harry. Just what we've been talking about. I tell you the freshman attitude in this place is getting worse and worse.

Harry. Just because a man won't walk all the way down to the post-office so your daily letter to Doris will make the afternoon mail train, you start moaning about frosh attitude. Heh, I'm laughing.

Tom. (unwillingly contrite) I would, Dick, but I've got that French mid-year Tuesday. Look at it snowing, anyway.

Dick. All right, all right, I give up. But I'll bet it was different a few years ago. My brother came here in '25 and he says they used to hop on the new men early and teach them their manners right from the start.

Harry. Sure, we've all heard plenty of tales of interclass hazing, the way it used to be -- they sent one freshman class down to the village green, everybody in white flannels, one rainy afternoon. Called it a tooth-pick field day, and made them race across the green with tooth-picks, end-over-end.

Tom. The tooth-picks or the frosh?

Dick. Both, nit wit! Let him tell it, will you?

Harry. The climax was surveying the whole area, with tooth-picks as the unit of length. But what good did that do? What of it?

Tom. Nice they've stopped that sort of thing nowadays. Flannels cost money. Besides I suppose there was a big mob standing around gawking at them.

Dick. Right! And that was just one of the steps. They sent my brother and the rest of his class out to Addison Four Corners one night after the first snow, to bring back a footprint apiece from the mayor. Walt said they got back just in time for chapel the next morning.

MORE

(Hazing discussion continued)

Tom. What's that radiator gag they used to pull on the freshmen?

Dick. Easy. A couple of big upperclassmen, wearing overalls would bust into a freshman's room -- and start taking out his radiator. When he raised a kick, they explained he hadn't paid his radiator tax and water rent. They would finally settle for five bucks and leave the radiator in. It happened to a lot of frosh every year.

Harry. To say nothing of the midnight paddle parties. The worst offenders, in the eyes of the armed sophomores, were yanked out of bed, marched down to Porter Pond, and told to "assume the angle." You take half a hundred husky sophomores in open contest to see who can hit the hardest and longest, and your freshman class begins to appreciate the mantel piece for a dining table.

Tom. (drawing long breath) Whew! Some fun, hey, kid?

Dick. You bet it was fun, and the freshman finished that course with a very clear idea of what college was really about. He learned that his little prep school kingdom was all over, and that his wasn't the first class to bless the campus with their presence. He even learned respect for the college and the men who were there ahead of him.

Harry. The ones who broke paddles across him and made him push pennies across a muddy street with his nose? Not on your life, Dick! Every freshman spent his spare moments thinking up specially original means of torture, to get even with the incoming gang. That process didn't help a bit.

Tom (actually deferential) This may sound out of place, coming from me, but I think the frosh this year have a pretty good idea what it's all about. We've found out a lot about the good old traditions of the place,and everything else that makes college what it is -- maybe indirectly, but I think we're beginning to get it.

Dick. Stop it, stop it! How are you going to get any respect for a place if it isn't hammered into you, right from the very first? Personally, I'd give a lot to be back in the old days when a student was a man, and had to take plenty to be able to stick it.

Harry, Suppose <u>you</u> stop it for a minute, Dick. There's a lot in what Tom says. We haven't lost much by growing away from the old hazing ideas. That's pretty much rah-rah stuff, anyway. Find that mostly in prep schools today. Culture and intelligence aren't taught with a paddle. Instead we've got a new program for the freshman, when he first gets here, and afterward. Right, Tom?

MORE

Tom. You mean all that freshman week period and like that? Believe me, that helps plenty. And I was surprised there were so few freshman rules here, too. I thought ---

Dick. There's another thing. When my brother was here all the frosh had a lot of regulations about clothes and matches and dates and stuff. That told 'em where to get off, all right.

Harry. So that made men out of them, did it? Picture the average frosh, back in the twenties, with his pea-green hat, his big red artist's bow tie, his white canvas gloves -- thumbs out all the time -- pants rolled up and white socks. If that's your idea of a man on his way to complete education, you're way off.

Tom. So that's the way things were, is it? (pause) Hey, look at that time! I gotta beat it if I'm going to make the post-office in time - uh - I guess it's stopped snowing a little, Dick.

Dick. Once more I give up.

(end)

Announcer.

When all of the practise rooms in the Music Studio are in use there comes forth as weird a combination of musical sounds as could be possibly invented: there is the even pound of a piano, the overtones of strings, and the undertones of brasses. Gordon Hoyt is at work with his cello on "The Concerto in E" by Goltermann in one of the second floor studios.

(Concerto in E by Goltermann)

Announcer

Whether a college student's major is fine arts or physical education he is usually interested in securing some kind of background in music. Professor Hathaway's courses in musical appreciation are always popular. The class has been studying Schubert's Unfinished Symphony. We'll take back seats in the Studio for a few minutes.

Discussion

(Measures of symphony)

Hathaway. Now you have heard again the two movements of Schubert's "Unfinished Symphony", one of the most melodious symphonies that was ever written, for with Schubert, you know, everything sings.

Mid years are just ahead - Is there anything we have taken up that I can review for you?

Student. I should like to have a brief explanation concerning the construction of a symphony.

Hathaway. I'll go over as much as I can in the short time that is left. I think we can't do better than to use the Schubert work I have just been playing for you. I am sure you already know that the first movement of this symphony is written in the regular sonata form which you will recall consists of three parts, the exposition, the development, and a kind of summary called the recapitulation. The exposition is that part of a symphony (or for that matter a sonata or concerto or string quartet) in which the principal themes are introduced; in other words, the composer takes a theme that occurs to him, after which he writes another in a contrasting key and between these, he puts a shorter passage called, quite sensibly, a "bridge passage". Then oftentimes after the second theme is finished he writes another short one called a closing theme to sound off the movement. These themes constitute the exposition. Before I play them, perhaps I should say in this particular work there is an important introductory theme and please pay particular attention to this for it figures very prominently in the development part.

(Symphony discussion continued - Hathaway speaking)

Hathaway. This is the introductory theme.

Music

After that has been given out in the lower strings, we hear the flutes, high above the shimmering strings giving out the main theme.

Music

And when thie motive after some repitition closes with a loud cadence.

Music

the horns enter on a single note

Music

which gradually fades away, and we come to these three measures.

Music

which seem to say, very plainly "A charming melody is coming" - and we swing into this familiar second theme -

Music

This second theme comes to an end with a loud note from the brasses and a descending pizzacati phrase in the bass strings. Here it is -

Music

This ends the exposition and we come to the development - the most interesting part for the musician but perhaps the least interesting for those who do not understand. In this development, Schubert develops the introductory theme, ignoring the others. Of course with the piano we miss the orchestral coloring which is so very interesting in this particular work. The development starts with a reiteration of this introductory theme.

Music

Then taking the first part of it only

Music

he subjects it to varied treatment. He inverts it, so that it moves upward instead of downward like this

Music

and tosses it from one instrument to another in imitation, making it a musical canon and a very interesting development.

Music-part of development

Then comes the final section, the recapitulation in which these are brought back again, so you see a symphony is not so difficult to understand for there is so much material repeated. The fundamental principal of composition is repetition

MORE

(Symphony discussion continued)

Student. But not all symphonies are so easily understood. Can you tell us the best way to learn to enjoy others that are more involved than this one of Schuberts?

Hathaway. Perhaps you were not present when I told you at the beginning of this course how important it is that you become familiar with the different themes, for it is by these that we remember symphonies, and when we hear them our memories may be greatly enhanced if we know something of the plan which was in the composer's mind, and the period in which it was written. In this way the intellect enters into our appreciation and we realize that a composition is not only beautiful, appealing to our emotions, but it is admirably and cleverly put together, appealing to our intelligence as well.

Bell

(end)

Announcer

There's the bell. You can hear that college band now all the way across campus. It sounds like Frank's " Dough Boys". We'll move the microphone nearer again.

(Dough Boys by Frank Frank)

Sprague In your other folio pick out the sheets of "The Old Midd Spirit", that we started working on last November.

Squeak from piccolo.

More life in that middle section that we were having difficulty with in the fall. Have you all found it? All right.

(Old Midd Spirit by Mrs. Edgar J. Wiley)

Announcer (chimes will play during this announcement)

If there are any college moments alumni would like to have reviewed over the air, or if there are questions on college life that future freshmen would like answered, send your ideas and questions to The Broadcasters, Middlebury College, Vermont, or to your station WGY at Schenectady. The Broadcasters will be on the air again at this same hour next week.

end.

1934

CAMPUS GLIMPSES

Middlebury College Broadcasters' Program
January 28 - 11:30 a.m.

Opening Signature (Chapel Chimes)

Announcer

The chimes from the Middlebury Chapel again bring to you the College Broadcasters, the first undergraduate organization in America to have as its sole object the presentation over the air of college days and college ways. We invite you to reenter college for a half hour while we reproduce for you some of your student moments. We take you back to your classroom, to your fraternity house, to chapel, to your dormitory, and offer a chance for alumni of any college to live again thirty minutes of college life. To men anticipating their college career we give a glimpse into the future. This program picked up directly from the Middlebury campus introduces first a double quartet singing Jesu, Priceless Treasure by Bach.

(Jesu, Priceless Treasure by quartet) 2 min.

Announcer

One of the foremost problems in the mind of every college undergraduate and every man planning to go to college is the prospect of a good job after graduation. Samuel S. Board, former head of the Yale graduate placement bureau and leading vocational councilor for several of the eastern colleges, is at Middlebury this week conferring with students on possibilities for work next year. He has just gone into conference with a group. We will listen to their introductory conversation.

(Discussion) 6 min.

Question. Mr. Board, what should a man consider primarily in deciding upon a profession or occupation?

Board. The first thing he needs to do is to look at himself, decide what type of activity he enjoys, what he can do best, where and how he wishes to live and what his responsibilities are likely to be. After he has done all this then he should look to see what the world wants done and how. He or you will usually find that there are a good many things the world wants done which you would enjoy doing. If you have tried this method and haven't gotten anywhere with it put all your facts down on paper as you assemble them. Of course when you are trying to find out about what the world wants done you will have to read, to watch, and to talk:

(Vocational discussion continued - Board speaking)

Board

..... to all sorts of people. When you do this, though, be sure and don't ask for advice about what you ought to do. Ask them what they do, or what is done in various phases of work. Get the facts and you can then make up your own mind.

Question. Do you feel, Mr. Board, that a man should secure a liberal arts education before starting any course of technical or professional training -- that is, if the professional study does not require a liberal arts course as a prerequisite?

Board. That depends on the man. We are undoubtedly coming into an age when the life of the average individual can be and will be greatly enriched and a liberal arts education does help us to understand literature, history, art and science, but there are two factors which make it undesirable. First, we have the matter of time. If a man is a little older than average in going to college, the requirements of professional training may mean that his entrance on his profession will be too long delayed and he must short cut. The same thing may be necessary because of money. It is difficult to work one's way through professional schools and if only a limited amount of money is available it should be conserved for that purpose. On the whole, however, if a man has the capacity for technical or professional work he will profit by at least two years and sometimes four years of liberal arts training. It helps him to understand people better, it gives him broader interests and helps him to grow into a man who is readily and easily adaptable to changing conditions.

Question. Have you found in your contacts with students that the fields of knowledge and activity touched upon in a liberal arts course help a man in determining what line of work he wishes to go into when he graduates?

Board. No, I can't say I do. In fact just the opposite is likely to be true because the new courses open up new vistas of activity and interest. The choice is harder because there are so many more things to choose from. That doesn't mean that it is a bad thing to go to a liberal arts college, however. The way out is for the student to be investigating all the four years of his college course just what there is for him to do afterward. Even if he changes his mind a dozen times he will be better prepared in the end than if he hadn't thought about it at all. Many of the liberal arts colleges are

(Vocational discussion continued - Board)

Board

..... organizing or have already set up departments to help their students with this problem. The trouble is that most students put off thinking about it until the spring of senior year and don't take advantage of these efforts made to help them to decide intelligently about the future. You can't help those who won't help themselves.

Student. I have been wondering whether prospective employers place more weight upon high marks in studies or on a man's record in extra-curricular activities.

Board. A great deal of nonsense has been written and said upon just that point. The fact is it depends a good deal on what the employers interests were and are. If he was a brilliant student he is likely to look for that in others. If he was a star on the campus he probably will favor other stars. However, the job to be done also makes a lot of difference. If the job requires hard or brilliant thinking and keen analysis, intelligence is naturally valued. If it requires leadership, energy, and enthusiasm, the campus leaders are naturally favored, but if it requires technical skill of a high order, those who have high marks in the science will get first chance.

Of course, the ideal of every employer is to find all these in one man. It seldom is done, however, and when this is the case the man is likely to be a good deal of a prima donna and find it hard to adjust himself to the obscurity and routine of an every day job. A well-known company which probably employs more college men than any other concern made a study some years ago purporting to show that the high-standing men had made the most progress in the company. What wasn't made clear in the report was that the company had for a long time chosen college men for their leadership qualities, their personalities and their extra-curricular activities. Given those in most of those chosen it would naturally follow that those possessing high intellectual ability would go up faster.

Question. What is the first thing you would recommend that we college seniors do in getting a job? Whom should we approach and how should the approach be made?

(Vocational discussion continued)

Board. The first thing a college senior who wishes to get a job should do is to determine what kind of a job he wants and describe it as clearly as he can on paper. The next thing he should do is to register with his college placement office and find out just what facilities they have to offer. Employers register their needs there and later come in to interview. In addition, there are usually various alumni who are willing to help and these can be consulted through the placement office. Finally, if the senior knows what he wants to do and in what business, he can begin a canvass of the better firms in that business and make a systematic canvass of these companies in person or by letter.

It would take me another hour to tell you all the things an ingenious senior can do to land a job, but these should be the first steps. Men aren't sought very often today unless they have special abilities which are rare. They must seek instead.

(end)

Announcer

The Language Clubs on every college campus best combine educational and social activity. The Middlebury German Club is just concluding one of their folk song fests after which they will have a round table discussion on German Education under Hitler. In a minute we will hear Dr. Neuse (Noiser) being plied with student questions.

(Round table discussion 5 min.
Dr. Neuse)

Question. What is the underlying theory, Professor Neuse, upon which the Nazi movement bases its drastic reorganization of the political, economic, and private life?

Answer. It is this: the State is everything, the individual is nothing, or rather only something that contributes to the life of the State. That means every single item of your life is regulated by, and must be approved of by those who represent the State, the leaders. Thus Hitler, you know, the head and supreme spokesman of National Socialism, is always referred to as the "leader".

Question. In your classes, Professor Neuse, you always emphasize that individualism is one of the principal traits of the German character. How is the present enthusiasm for the Third Reich reconcilable with the individualistic tendency so apparent in German history and literature?

Answer. It is true that individualism plays an important part in German life, but we must not forget the other side which always counteracted it, the group spirit and the trend toward organization. The group spirit was there first. Only the Renaissance is responsible for the idea of the individual's private life and aloofness from the mass. The liberalistic era of the 19th century emphasized private initiative and individual acting and thinking still more. Nazi philosophy and practice brings out the original early group instinct and fights against individualism.

Question. Does the Nazi outlook on life then mean a reversal of History to pre-Renaissance times?

Answer. Exactly. It is an effort to re-create the medieval spirit of subjugation under a higher authority. Now the State has taken the place of the Church, but the former guilds and their order and laws are going to be revived and will be the expression of the group in which the skilled craftsman and laborer may find expression for his individual art.

(Hitler discussion continued)

Question. Do you think the German people as a whole are happy under this new order?

Answer. Probably a large number of German intellectuals find it hard to live under national socialism which represents in the last analysis, the outlook upon life of the middle class.

Question. Could you tell us what influence the advent of National Socialism has had upon education in Germany?

Answer. The educational changes that the Hitler government has brought about in Germany are as sweeping and far-reaching as the political changes that we have witnessed during the last ten months.

Question. Can you give us a few facts that indicate the steps to be taken in education in order to bring up the younger generation according to the Nazi doctrine?

Answer. There will be a drift away from abstract sciences, and much stress will be placed upon the practical side of life. Physical education, military sciences, geography, history, will be given a larger share in high school and college curricula. In foreign languages English will have a preferred place, French being too rational an idiom.

Question. Will the stressing of the practical arts and crafts eventually mean a decrease in high school and university attendance?

Answer. Naturally. It costs money in Germany to send one's children to high school, as you know, and why should the parents give their children a costly education if later in life they are not allowed to make use of it; well, it may even prevent them from earning a living later since they have not availed themselves of their youth to learn a practical trade. According to the latest Nazi decree only one third of all high school graduates will be admitted to the university. You can imagine what that means in regard to both institutions. In a city like Berlin alone about fifty schools may be wiped out or combined with others. The teaching staffs will suffer an equally drastic cut.

Question. Along what lines will they select those students who may enter universities?

Answer. The university shall no longer exist as an institution to create class distinctions. Neither social standing or money prerogatives will have a bearing upon the selection of the happy few. They say the 'entire personality i.e., not only his mental and moral abilities but also his physical aptitude shall be decisive,- in other words men who promise to be good "leaders". Which, of course, means that the university career in Germany from now on will be reserved to party members of the National Socialists. Dissenters will have to look elsewhere for an education.

Question. And where do the women come in, Professor Neuse?

Answer. Well, nowhere. They go out. They will be relegated to the three c's: cooking, children, church. Ten percent, for the time being, may continue to attend universities, but that number may be cut down still further. This reduction must eventually result in a complete disappearance of girls' high schools.

Question. Will this development have any effect upon the rest of the world?

Answer. The National Socialists think, of course, that they are pointing the way to all other nations. It would be difficult, however, to institute a class organization of the 15th century, let us say, in America. Germany, with a history of a thousand years behind her, may rightly think that other times were happier than this age. The year 1934 will tell us more about the statesmanship of Hitler and his aides. Perhaps they will find the cure-all in their theories of National Socialism and will make the Germans happy, and if they can make the world forget what is troubling it in the German picture we may well wish them good luck.

(end)

Announcer

Another form of student activity no less interesting than the language clubs are the informal studio recitals. These furnish some of the most important musical events to any campus life. Miss Prudence Fish of the Middlebury Music Department is giving a program which includes the selection Great Peace Have They Which Love Thy Law by James H. Rogers.

(Selection by Miss Fish) 4 min.

Announcer

Faculty homes are always open over the weekend for student visits. A

One of Professor Perkin's students, who is a prospective math teacher is in his study discussing the age old topic of angle trisection.

(Discussion) 3 min.

Student. Professor Perkins, I came over to see you about this clipping from this morning's paper. It shows another scheme for trisecting an angle. I wish you'd tell me why there is so much fuss about a problem which seems to have so many simple solutions.

Perkins. I'm glad you came over. As I have said many times, to become a really good teacher of mathematics you must not only know your subject, your students, and how to teach them your subject but you should be acquainted with some of the famous mathematical problems, pastimes, and games such as the Fermat problem, the squaring of the circle, the reduplication of the cube, and the trisection problem which you bring up.

Student. This trisection problem seems to provoke the most general interest in spite of the fact that anyone can do it easily and with sufficient accuracy to suit the most particular. I've done it several times by simply describing a big circle with the vertex of the angle as a center and dividing the arc into three equal parts with the compasses. The lines joining the two points of division to the vertex apparently trisect the angle.

Perkins. Yes, that does give a fine approximation but you must admit that your construction is, both theoretically and practically, only an approximation. The rules of the game require a theoretically exact method in which only a compass and an unmarked straightedge shall be used ..... Do you play football?

Student. No, sir, but I know the game pretty well and I get a big kick out of watching it.

Perkins. Well, perhaps it is just as well you don't play because I'll feel safer making an analogy. Suppose I said that I don't see why so much fuss is made about carrying one small pigskin filled with air across a hundred yard field a few times or why it requires eleven men and a whole afternoon to do it, or why so many men are so violently opposed to its being carried. Why, before I was twelve years old, I carried single-handed one good sized pigskin filled with pig more than two miles in less than an hour and nobody except the pig objected at all. In fact, it seems as tho' nobody but a pig would object!

(Laughter)

What would you say to that attitude?

Student. I'd say that you didn't know much about the game of football or its rules.

Perkins. (chuckle) I'm glad to say you are not quite right about that. But do you get the analogy between your remark about the trisection of an angle and mine about football? In neither case are we trying to get a pig to market. If we did we would find it to be only a skin filled with --- er, shall I say, hot air? What we are doing in both cases is playing a game according to the rules.

(Math discussion continued)

Student. I see. You admit that there are ways of trisecting an angle approximately but not of doing it with perfect accuracy.

Perkins. The first part of your statement is true but not the last part because you forgot to mention the rules of the game; you cannot trisect the angle by means of straightedge and compasses alone. I will gladly show you or furnish anyone who is interested with several very simple theoretically accurate constructions of the trisection problem. But all of them violate the rules of the game usually by a trial and error procedure which is not allowed. Also several very approximate methods using only the two tools prescribed have been devised but they cannot be proved to be theoretically correct.

Student. This method I have here seems to show the three parts of the angle to be exactly equal so there must be a violation of the use of the compass and straightedge. Is that what you mean?

Perkins. Exactly, and our interest as mathematicians in this famous problem is maintained by the game these various proposals make for us in trying to discover just where their authors broke faith. It is often difficult to see by a casual inspection just where the falacy lies. One of these days I'm going to take time to show your class how it is proved in more advanced analysis that the problem cannot be theoretically solved. Now let us take the solution you have there, Gene, and see if we can find where this person violated the rules ..... Suppose

Fade off-announcer interrupts

We try to trace through his construction .....

(end)

Announcer

While Professor Perkins is determining the validity of this new solution we will walk over to Mead Chapel where President Paul D. Moody is conducting the daily chapel service.

(Organ Music
Conclusion of prelude)

(Discussion by President Moody) 3 min.

President. In these readings in Chapel I have tried to remember always that you are students and have attempted to make the readings contributory to your knowledge as well as to your sense of worship. And that is why I have been reading from Isaiah. You cannot understand the passages we read unless you remember that they were rather patriotic and political and economic utterances, as much as they were religious. Isaiah saw the nations by which his people were surrounded. But always behind their thrones and chancelleries he saw God, working out His plans and purposes. He stood out against certain actions and certain policies and certain alliances, not only because they were politically unwise, but because they would be false to God as well. And he cried out against certain practices which were carried on as economically unsound, and bound to involve the nation in ruin. Excessive luxury, monopolistic greed, confusion of moral values, were the evils of the day, and they were repugnant alike to God, and any open eyed student of human affairs. If Isaiah taught anything it was that the supreme disloyal ty to God was manifested in disloyalty to their fellows, and there could be no disloyalty in dishonest practices to the less fortunate of their day which was not fundamentally disloyalty to God. And the timeliness of these passages today must impress everyone of you who endeavor to be students of our times. You have only to change certain of the figures of speech and eliminate the Oriental imagery and they would most of them apply today and might many of them be delivered by reformers or prophets of righteousness in this year 1934.

I beg of you not to think of Isaiah's day as so essentially different from our own. Our modern inventions change the exterior of man but not the interior. There is hardly a single economic wrong which can be pointed out today that Isaiah does not see among his own people. The agrarian problem is touched in that passage: "Woe to them that join house to house till they are left alone." The liquor problem too, is in that same passage. But Isaiah was far saner in his handling of these problems than many of his successors who might well study what he says.

That he wrote with a splendid literary style you can hardly help noticing, as morning after morning we read his utterances. But I do not want you to lose the message in the beauty of his language. The heart of his message was in his vision, when he saw God behind and above the King, and learned that if enemies were victorious over his people it was because God allowed it, as corrective discipline and punishment. It

(President's discussion)

was not more might. But at the same time some of their troubles were the direct result of their folly. I leave it as a question to you this morning whether we should look upon such a thing as the depression as a result of our folly in the boom years when we ignored economic common sense, or Divine disfavor and punishment for this, or both. Isaiah, I believe, would have said both. That is why he is so valuable for you today, and why you who are students of political science and economics will feel repaid for attending to that which he has to say.

(end)

(Double quartet sings

Fierce was the Wild Billow 3 min.

by Noble)

(No pause between end of speech and quartet)

Announcer (chimes will play during this announcement)

If there are any college moments alumni would like to have reviewed over the air, or if there are questions on college life that future freshmen would like answered, send your ideas and questions to The Broadcasters, Middlebury College, Vermont, or to your station WGY at Schenectady. The Broadcasters will be on the air again next Saturday, February 3, at 1:15 p.m.

CAMPUS GLIMPSES

1934

Middlebury College Broadcasters' Program

February 3 - 1:10 p.m.

Opening Signature (Chapel Chimes)

Announcer

The chimes from the Middlebury Chapel again bring to you the College Broadcasters, the first undergraduate organization in America to have as its sole object the presentation over the air of college days and college ways. We invite you to reenter college for a half hour while we reprodude for you some of your student moments. We take you back to your classroom, to your fraternity house, to chapel, to your dormitory, and offer a chance for alumni of any college to live again thirty minutes of college life. To high school students anticipating their college career we give a glimpse into the future. This program is picked up directly from Middlebury.

On the way to the campus we will look in at the Middlebury Inn. This is one of the social centers of the College as well as one of the amateur winter sports centers in Vermont. Across the colonial lobby a group of students evidently are discussing skiing or snowshoeing rather informally.

(Discussion) 3 min.

Van. This is my idea of a mid-winter's-day dream, Betty. A roaring fire about two feet away, plenty of wood in the basket, eighteen inches of snow outside, and not another class until Monday.

Dick. The mercury hit a new low last night. What weather for the hockey rinks! Boy, this is winter!

Betty. Think how grand it must have been at Pleiad Lodge last night! There must be at least three feet of snow up there now.

Van. Please. I was just getting comfortable and you start talking about sleeping out in the mountains. Why not imagine the lodge on Lincoln Mountain? The ventilation's even better up there.

Dick. I went with the Mountain Club on that overnight trip to Bread Loaf last week. There were over five feet of snow and was it swell! Every spruce and balsam on that whole mountain had turned into a snow ghost. It was uncanny - everything white and motionless, like - like -

Van. Like a Ku Klux Klan convention, maybe?

Betty. I've heard so much about the snow-cones on the spruces. I'd like to see them myself. I guess you'd need snowshoes all right for a trip like that.

(Discussion continued)

Dick. And it's a good idea to stay on them too. One time I broke the harness on one snowshoe, going up the trail on Lincoln. I'll never forget stepping off into a drift to fix it --- thought I'd never hit bottom. Remember, Van, it was just beyond Battell Lodge.

Betty. Joseph Battell never knew what a good turn he did us when he left the college those 30,000 acres of woods and mountains, did he? He must have been a grand old man.

Van. He was all of that, Betty. You know he would never let anyone cut down a tree within sight of Bread Loaf Inn. That is one reason why he bought so much of the country up there in the mountains - to save it.

Dick. With eight lodges and a hundred miles of trail some of us ought to be up there every weekend ---- Now there's an idea, Van! Lincoln Mountain, before this snowfall's gone. I'll bet it's swell, right about now.

Van. Oh, but think of all the energy it takes to get up there. The part I like best is that sleigh ride from Lincoln village to the foot of the mountain. Nice comfortable sleigh - nothing to do but lie back and watch the peak come nearer.

Betty. How high is Lincoln?

Dick. Over 4,000 feet, and what a view! You can see the College Chapel far down the valley. Across the white shoulders of mountains to the north you can see Jay peak in Canada. Mount Washington and the White Mountains in the east. The Adirondacks piled above Lake Champlain in the west - south almost to infinity. All in a clear windswept panorama.

Betty. It sounds perfect! Gee, I'd like to see it.

Van. Sure, tell us some more, Dick. I don't get tired <u>listening</u>.

Dick. Why talk about it? Let's <u>go</u>.

Van. Oh, I was afraid of that. <u>When</u>?

Betty. I can start any time!

Dick. Tomorrow?

Van. There goes my afternoon nap.

Dick. Don't let him fool you, Betty. He always puts up an awful howl before we start but he's really quite the trail hound.

Betty. You can choose any of the 307 other coeds in college for company, Van.

Dick. And there are plenty of boys right in our house who would want to go. Ought to have about five couples, altogether.

Van. What high pressure salesmen you two turned out to be. I surrender.

(Discussion continued)

Dick. Well, Betty, now that we have him sold let's decide what we've got to have. Four knapsacks should be plenty - only one meal.

Betty. Oh, but I haven't any snowshoes.

Van. No hitch there - get them from the club when we borrow the knapsacks.

Betty. And I'll get a camera - and two rolls of films - and -

Dick. Whoa! I'm thinking ---- ten people ---five pounds of steak -- potatoes -- bacon --- coffee --- hey, we'd better get going and collect things ----

(end)

Announcer. We congratulate Dick and Betty on their converting Van into an active mountaineer, and will leave them to finish their plans while we connect with the microphone at Mead Chapel where the choir is practising the anthem for Vesper Service tomorrow.

(Listen to the Lambs

by Dett) 5 min.

Announcer. The choir includes about forty of the best voices in college. Usually a rehearsal winds up with less religious measures. We will return to hear them later. But in the meantime we'll sit in on a Liberal Club discussion down in Starr Library. It's really too good to miss. Economics is the stable subject of most college Liberal Clubs. War is the phase the Middlebury boys are excited about now.

(Discussion) 5 min.

Andy. But listen, Bill, you know just as well as I do that war never got anybody, anything. Nobody ever won a war yet and nobody ever will. It can't be done.

Bill. Why can't it be done? Didn't the Allied Powers and the United States win the last war?

Andy. Say, what do you mean by winning a war?

Bill. Just this. Our military forces --- our men --- our guns ----were sufficiently superior to those of the Central Powers to overcome them. On November 8th, 1918, the Allies presented their terms of an Armistice to the German envoys from Berlin --and the Germans had to accept. That is my point. We won the war.

Carl. You mean to imply, then, that the allies, by forcing the Central Powers to accept their terms, won the war?

Bill. Precisely.

Andy. What did we gain? How much better off are we now than we would have been if there had been no war?

(Liberal Club discussion continued)

Bill. That war was fought to make the world safe for democracy ---wasn't it? It was fought to protect the rights of the Allied Powers -- to protect the interest of you and me here in America.

Carl. Sure, that was what we were fighting for all right. Ask anybody who read the papers at that time. Ask anybody who bought Liberty Bonds. Tell me frankly, Andy, do you believe that any nations are better off for having sacrificed the lives of some six million men? There were approximately sixty-five million men under arms during the World War. Of these around nine million were killed in action or died from wounds. That doesn't include those who have died since as a consequence of injuries they received. Twenty-two million were wounded and seven million were permanently disabled. More than five million men were reported as missing and probably the majority of these were blown to bits --- leaving no means of identification. What do you think of that?

Bill. Well, that has to do with the whole war, doesn't it? Those figures include the losses by the Central Powers as well as those by the Allies.

Carl. Yes, to be sure, but do you realize that two-thirds of the men mobilized -- and two-thirds of those killed, were on the Allied side? And here is something else to consider -- that the number of civilian deaths due to the war was slightly larger than the number occurring in military service. Figure it out for yourself. Practically twenty million men lost their lives through the war -- and two- thirds of them were on the side which won! Think that over!

Bill. Well, we won, didn't we?

Andy. Do you believe that anything we gained from the war was worth the price we paid for it? Personally, I feel that the human cost of the war was the chief consideration, but there was an economic cost of some two hundred seventy billions of dollars --- which means that the war cost over ten millions of dollars an hour. Just think of the schools, colleges, and universities that such a sum of money could finance if it were used for education -- instead of destruction and man-slaughter.

Bill. But we fixed the responsibility for the war--the reparations should do something toward making that up. The United States has some eleven billions owed her in war debts, hasn't she, to be paid in gold!

Carl. Yes, she has, but did it ever occur to you that in the whole world there are only nine or ten billions in gold, and approximately four billions of that are right here in the United States? Pray tell--will these war debts ever be paid in gold?.

MORE

(Liberal Club discussion continued)

Bill. Why can't we accept it in goods? It could be paid in that way easily enough.

Andy. If we were to do that, it would require a complete reorganization of our economic system--or our home industries would be ruined. You can see what would happen if we were to open our doors to eleven billion dollars worth of European goods.

Carl. And, incidentally, gentlemen, this is a good subject for us to take up next week. You fellows think it over because this matter of trade between nations is certainly a big problem in the world of affairs today.

Bill. If you ask me, I should say that most of the wars ever fought have started through competition for markets. Nations are always trying to secure markets for their goods.

Andy. There may be something in that, but I maintain that no trade control is worth the lives of millions of men, and property damage, destruction, and economic costs reckoned in tens of billions of dollars. What one nation wins, another loses, and don't you forget that the nation who wins can never win enough to compensate for her costs in men, goods, and money. The winner can never hope to get his money back -- let alone getting any return on his investment.

Carl. Well, gentlemen, the papers every day are full of accounts of increased armaments -- bigger and better airplanes and battleships -- more deadly gas--together with more effective means of protective and defensive warfare. Why, if we were to have another world war, it would be so terrific as to make the last one look like a pink tea party. You can't get away from that! And what is worse, it looks as if something might start almost anytime in this old world of ours. Listen, you fellows, if the President and Congress of the United States should declare war on any foreign power tomorrow, what would you do? Would you fight or not? (fade out)

(end)

Announcer.

It is strange that the college world cannot come to terms with the political world on the subject of war. For the sake of variety let's pick up some of that music in Hepburn Social Hall. Jazz, original variations on college songs or something classic, all depending on the pianist is usually coming from the Hall. It's Vincent Sargent again. The boys are lounging around pretending to read magazines and newspapers but they're really interested in the music. He's playing MacDowell's Shadow Dance.

(Music Continued)

(MacDowell's Shadow Dance) 2 min 25 sec.

applause

(Through the Snow by

Percival Driver) 30 sec.

Announcer.

We'd like to listen to Vincent longer, but we want to visit one of the theoretical courses in Physical education taught by Coach Brown. We will break into the class discussion.

(Discussion) 5 min.

Student. Coach, what do you consider the main difference between present day methods in training compared with those practiced twenty or thirty years ago?

Coach. As I see it, training methods have advanced at least as rapidly as most other scientific procedures. In the first place the entire viewpoint about training has changed. In the old days, coaches for the most part used to drive their men. They seemed to feel that the more drudgery introduced the better the results. Today, the men who are entrusted with the development of our athletes realize more thoroughly the tremendous advantages obtained from a proper attitude of mind. They introduce more variety in their daily routine and endeavour to make the afternoon practice sessions a real pleasure rather than just a grind.

Student. How has science entered in?

Coach. With a more scientific viewpoint on methods of diet, rest, etc., Coaches are naturally in a better position to give their men the advantage of advanced research. I suppose, after all, it is merely a scientific advance which we should expect, but I do believe a great deal is due to the type of men who have been attracted to physical education as a profession. If you will just think over some of the men you know who are in the work I am sure you will agree that they are as fine a group as you would care to meet and that they are in this work because they feel they are contributing something of real value to society.

Student. Do you consider that a coach is justified in following out a general program of work for all members of a squad who are competing in the same events?

(Athletic discussion continued)

Coach. Absolutely not. A coach should study his men very carefully. No two of them are alike and what agrees with one does not necessarily agree with another. For instance, one man may thrive on plenty of work while another may be more effective with very little. I know of one young fellow who had starred as quarter back on a large high school football team. He went to college and for awhile his coach worked him along with the others, but he failed to find him a brilliant player until he tried the experiment of keeping him out of all contact work during the week and playing him only part of a game on Saturday. From that time on he realized that he had a real star. This boy weighed exactly 142 pounds. On the same team there was a big tackle who weighed 195 pounds and the coach discovered that this man performed best only when he was doing a great deal of work and scrimmaging regularly.

Student. Does the same apply to track?

Coach. I can cite another instance of a champion college miler who had been pretty good in his preparatory school days but who failed to show much in college until his coach discovered that after his preliminary training period was over he performed best by taking a walk on Wednesdays and competing on Saturdays. To be sure these are unusual cases but perhaps they will serve to prove my point that individuals differ greatly in their physiological make up.

Student. What do you consider is the responsibility of the department of physical education with reference to the physical welfare of the student?

Coach. I believe every student is entitled to a thorough physical and medical examination. He is also entitled to frequent and friendly conferences on his physical condition. Furthermore, the department should provide reasonable facilities and a well balanced program with emphasis on carry over activities and out of door sports whenever possible and should encourage all students to become regular participants in this program throughout the year.

Student. What do you think of the relative value of varsity and intramural athletics from the educational viewpoint?

Coach. Personally, I feel that both varsity and intramural athletics are essential in every well rounded educational program. Varsity athletics in our physical education departments might well be compared to advanced courses in other departments. They represent the highest attainment and are quite necessary for students of marked physical ability. Intramural athletics represent the regular courses and should be regulated to students of average ability.

MORE

(Athletic discussion continued)

Student. What is your opinion concerning the probable future development of varsity and intramural athletics?

Coach. Well, of course, varsity athletics are already highly organized while intramurals still have many possibilities which could be developed. Consequently, I should expect to see a greater advance in the intramural rather than the varsity phase of physical education programs. However, I feel quite strongly that the two should go hand in hand and except in particular circumstances, it would be a serious mistake to promote one to the exclusion of the other.

(end)

Announcer.

Training, training - it's one of the key notes of college life. Training in gymnasiums, laboratories, libraries, studios. The choir has just finished their formal afternoon training and have all joined in singing college songs. They're beginning on The Palisades.

(The Palisades) 4 min.

Hail to The White & Blue

Announcer. (chimes will play during this announcement)

If there are any college moments alumni would like to have reviewed over the air, or if there are questions on college life that future freshmen would like answered, send your ideas and questions to The Broadcasters, Middlebury College, Vermont, or to your station WGY at Schenectady. The Broadcasters will be on the air again next Saturday, February 10, at 1:15 p.m.

CAMPUS GLIMPSES

1934

Middlebury College Broadcasters' Program

February 10 - 1:15 p.m.

Opening Signature (Chapel Chimes)

(Chimes and announcement - 1 min)

Announcer

The chimes from the Middlebury Chapel again bring to you the College Broadcasters, the first undergraduate organization in America to have as its sole object the presentation over the air of college days and college ways. We invite you to reenter college for a half hour while we reproduce for you some of your student moments. We take you back to your classroom, to your fraternity house, to chapel, to your dormitory, and offer a chance for alumni of any college to live again thirty minutes of college life. To high school students anticipating their college career we give a glimpse into the future. This program is picked up directly from Middlebury.

In a few days the Glee Club starts on a New England concert tour. They're doing intensive rehearsing now. We'll connect with the music studio first.

5 min.

(John Peel - English Hunting Song)

general conversation

(Cane and Panther Song)

Announcer

Other groups of students that do considerable touring are the sociology classes. Professor Sholes has just made an announcement in his criminology class about the next trip to New York, scheduled for Easter vacation, and the students are informally discussing plans.

(Discussion) 4 min.

Sholes. The trip will supplement the Christmas one, and we shall see what may happen to a number of the same people we visited then, if they fail to get along peacibly with each other in the miserable conditions under which they are born and grow up.

Les. What do you mean? We saw them as adults and they were making a living buying and selling just as the rest of the world does.

Sholes. Yes, we saw that but we didn't see the ones that failed to make their adjustments and ran into the law.

Ken. Then we are going to visit the prisons?

Sholes. Not alone the prisons but the courts where the little troubles in their lives are aired. We want to see and hear them tell their own difficulties so that those statistical tables you have studied in the text will have

MORE

(Sociological discussion continued - Sholes speaking)

Sholes

....a little more humanity in them.

Les. Won't they be like the men we saw in the bread lines and at Gold Dust lodge?

Sholes. Perhaps,but we are planning to visit the court of domestic relations, the juvenile court and the women's court as well as the night courts. We want to see every type of difficulty - not just the difficulties of those who are down and sometimes out.

Les. Ken and I went through a federal prison last summer and found that the federal prisoners weren't so different from those we saw at the state prison when the class visited there.

Sholes. They aren't of course, they have just failed to adjust themselves to federal law instead of state or local laws. The principle is the same with all prisoners. Society demands a penalty for infringement of the rules just the same as the fraternity or the college does. It is a difference of kind of disobediance.

Ken. But those people we saw in the slums can't realize what all the laws are about when they have such a struggle to get along as it is.

Sholes. That is one of the reasons for these trips. You, brought up in good surroundings, with a good place to live, to eat and to play, don't realize how difficult it may be for someone else to see the wisdom of some of our laws. Your environment has a lot to do with your chances of getting into trouble far more than the fact you have gone to college.

Les. The environment isn't all of it, is it? I worked in an insane asylum one summer and some of those people came from families that had had insane members every generation. If they got into trouble you couldn't say it was environment, could you?

Sholes. Of course not, but do you realize that our law based as it is on old concepts makes but little distinction between good and bad environment or good and bad heredity. However, a change is gradually taking place. We have the indeterminate sentence, the Baums Laws, the juvenile court, the woman's court, the court of domestic relations, etc. They are all recent and are an appreciation of the fact that each offender is an individual case and cannot be treated in the same way.

Les. Will we see how the idea of individual treatment is used?

Sholes. You will, in the juvenile court for instance. Every kind of crime comes into it yet in no case is the treatment the same as if it were an adult who had erred. A case history of the child is just as much a part of the case as the offender himself and most juvenile courts don't allow any lawyers, as such, in them.

MORE

(Sociology discussion continued)

Ken. Then how can we be sure that the prisoner is protected? The lawyer is supposed to be there to make sure that no advantage is taken of the prisoner, isn't he?

Sholes. That's the theory.

Ken. I'm studying for law and I have always had that idea.

Sholes. I said it was the theory because with a definite punishment for a definite crime as the old concept was, a lawyer was the necessary means of protection for the prisoner. In this newer concept of treatment as with the indeterminate sentence the lawyer like the judge is more of a referee than an active participant in the case. If we can get good judges we shan't even need a jury to protect the prisoner. He will be tried and treated upon his future prospects as well as his past. It won't be a game as it now is, but more like a visit to the doctor. Imagine the percentage of recovery if we acted toward a doctor as we do in a court. Made him treat us without an examination or any knowledge of our past physical history.

Ken. I hadn't thought of it in that way. Is that why there are so many old offenders in the courts and the prisons?

Sholes. That is why. The time will come when a lawyer will be as anxious to tell his clients' past as he is now to prevent it. He will be as professional in his conduct of the case as a doctor is and it will be working for society as well as for the patient.

Les. Yes, but! ! There will always be people who will commit crimes the second or third time. What will you do with them?

Sholes. People have communicable diseases, and we isolate them, if they turn out to be carriers of the disease and a menace to society we keep them locked up. We will have to do the same with habitual offenders, not only that but prevent any more of their kind from being born. Seventeen states have the laws to do that now for various conditions.

Les. I can't see that exactly.

Sholes. You may not see it but you feel it. It costs every man, woman, and child on the average $100.00 every year for crime. There is a limit to the cost we can stand if not to our vision. Elimination of the unfit by isolation, for example the feeble minded, can be cut in cost tremendously by sterilization and they can be returned to society to function under supervision. We can do as much for the law breaker, supervise him, and if he just can't behave himself prevent anymore of his kind.

(end)

Announcer

Saxophone, trombone, and trumpet playing makes some of the outstanding sociological trouble in every dormitory - all depending on the player. On the third floor of Painter Hall a real trombone artist is on the job. It's worth climbing two flights of stairs to hear him closer.

(M'Appari Tutt 'Amor) 3 min.
Like a Dream
by Friederick von Flotow)

Announcer

We leave the comparitive quiet of Painter Hall and make our way to the Campus printing plant. Here prospective journalists have an opportunity to follow their brain children from the typewriter to the mailing department. The last pages of the college newspaper should be on the press now, but we might drop in to see if there is any excitement.

3 min.

(Discussion)

Betty. Just a minute, Mike, and I'll have the last story pasted on the dummy for you. Pages two, five and six are out there, anyway.

Mike. I know, I know, and the first form is already on the press, but we've got to get this second form ready in fifteen minutes, and the whole front page has to be put together.

Betty. All right, here it is -- whew, what a rush -- can you make it out the way I've got it? That middle column story is the junior week elections -- the body is on galley twelve -- and oh, heavens! I haven't checked the head yet -- wait ---

Mike. I can be putting the rest of the page into the form -- leave the dummy here on the stone. Sure everything's in now?

Betty. Yes, sure, I - I think so. Oh, hurray, here comes Jack.

Jack. How's the super-extra-five-star-final coming, folks? This the front page, Mike?

Mike. Yeah, so far -- just got the dummy. Let's see here - Winter Carnival goes in column five ...

Jack. Hey! What goegon here? You're not running this basketball game on the front page! How many times ---

Betty. Oh, Jack, that's got to go there -- look at the time! Besides, we won, didn't we?

Jack. Doesn't matter -- it wasn't a home game, and it wasn't state series -- rip it out, Mike -- make room for it at the top of the sports page --

MORE

(Campus skit continued)

Mike. Ten minutes before press time, and you come along with one like that ---

Jack. Lot's go! Kill that badminton tournament and we can hold that interfraternity sports summary 'til next time --- there aren't any games before the next issue -- hurry it up, will you?

Betty. All right, let's see you find twelve inches you can cut out of the sports page -- go ahead ---

Jack. Twelve inches is too much for one game on a trip away from home -- shorten it down.

Mike. Don't be forgetting type isn't made outa rubber, you two -- you've got to hack out three inches from this thing.

Jack. You do that, Betty, while I check the other pages -- cut from the bottom.

Bob. Well, well, well, what a bustling little beehive. Are you going to be on time today, or do my men have to come back after supper to mail the out of town subscriptions?

Betty. What areyou doing in here, Bob? You're just the business manager, you know, and we've got work to do --- Is it all right to delete these last paragraphs on Karpinski, Jack? He was the forward that broke up so many Middlebury plays. He's ---

Jack. Sure -- everything but game details can go. Come on, Bob, be a good egg and scram, and we'll give your staff the paper right on time --- You're just holding us up now. G'bye please.

Bob. All right, someday you'll be sorry, sending me off in the storm like this -- is that your phone ringing?

Jack. Yes, answer it on the way out, will you? Here, Mike, these last two pages are okay, I guess, lock up the forms, if you want to.

Bob. This is for you, Betty, they want somebody on the CAMPUS. Just a minute.

Betty. Hello, yes, yes -- well, we're practically on the press now --- I say the paper is almost ready to be printed -- what do you want --- yes, there's a story in the issue about that -- yes, yes --- Jack! Take this, somebody's worrying about the Scullions Ball.

Jack. Thompson speaking -- oh, hello, Doug. Yeah, we had it all covered -- yes, it's on the front page, yes, everything's in, committee, chaperons, no -- no pictures --- I'm afraid we can't -- wait I'll read you the lead -- Betty, hand me the dummy, what a guy, thinks we haven't done right by his -- Hello, Doug, get this: Twenty five couples attended the Twelfth annual Scullions Ball Saturday night in Hepburn Commons. This dance is the most exclusive of the entire social season, invitation being limited to those men who have waited table freshman year in the commons" --- There's a lot

MORE

(Campus skit continued - Jack speaking)

Jack

...more about the orchestra and everything, and there's an editorial on page two - on "the nobility of work" all about the opportunity for working through college here, and how Middlebury recognizes democracy and honest effort. Okay? Good! See you later.

Mike. Come here a minute, Jack. These two front page stories don't balance exactly .. what do....

Jack. I'll say they don't --- Betty! Slice two lines off this debate story -- make it fit the dramatics advance there in column four -- any two, at the end of any paragraph but the lead ---

Mike. There's one other thing, Jack. A message came for you this morning - one of the girl's in the office took it and marked it personal -- on the desk there --

Jack. This? Oh..... hey! Get this, folks! It's the last minute announcement of the summer school staff --- Bread Loaf --- wow! It's the big story of the week....Why didn't you get a hold of this, Betty?

Betty. It was personal, I thought, and besides, what difference does it make now?

Jack. Difference? Difference! It's gotta go in, I tell you. Look at the men they've got on the faculty --- look! Names make news, y'know, and this thing's full of 'em --- listen: Hervey "Anthony Adverse" Allen; Theodore Morrison, Alexander Woollcott, Walter Pritchard Eaton - why, gosh! Gimme a typewriter.

Mike. Where were you thinking of putting this story, after you get it typed, set, and a head for it? Out in the margin somewhere?

Betty. Yes, Jack, the dummy is complete now! Where ---

Jack. (typing) Huh? The front page, of course --- take out those debate and drama columns --- I want a three column streamer head for this, Mike. Here it is: FACULTY ANNOUNCED FOR BREADLOAF SCHOOL OF ENGLISH INCLUDES NUMEROUS LITERARY LUMINARIES -- there, how's that? 24 Point Cheltenham, and I hope it fits....

Betty. Oh, there goes my perfectly balanced page --- here, Mike, tear out these two stories here --- hurry, Jack, look at the time!

Bob. Wow! I guess you're right, this is no place for me. I'll send in some coffee and sandwiches at midnight.

Jack. There! That's the lead - give this to a linotyper and tell him there's more coming. I'll send it out paragraph by paragraph and tell him, too, I'll nick him a dollar for every mistake.

Mike. All right, all right, but in my forty-eight years of press room work, I never saw....

Betty. Y'know, Jack, we won't be so terribly late, after all...whew imagine getting out several editions of a metropolitan daily -- every day.

fade out on sound of typewriter and prose.

Announcer;

That conversation promises to be not too appropriate for broadcasting. The atmosphere is more rarified at Mead Chapel where the Glee Club of the women's college is having a session under Miss Fish.

(Nina by Perglosi) 3 min.

Announcer

This is our last chance to look in at the Bacteriology laboratories. Two men have just entered and appear to be cross examining Dr. Barney.

(Discussion) 6 min.

Student A. Well, to come to the point of this visit, we were involved in a discussion last night in the dormitory which led from books in general to one in specific, Sinclair Lewis' Arrowsmith.

Barney. That is the book for which he was awarded and declined the Pulitzer prize, is it not?

Student B. Yes. But our interest in the book last night was not a literary one. Our session took on something of a scientific aspect and we soon lost ourselves in relating our childhood experiences of and opinions about immunity, especially regarding this trick substance which Dr. Arrowsmith used to cure some of his patients of cholera.

Student A. Some of the fellows thought the cure he used was merely an imaginary substance that happened to fit into the fiction.

Student B. Yes, they felt that his germ-eating bacteriophage (is that it?) was perhaps a prophetic thing ------

Student A. Or a thing ultimately to be hoped for perhaps as a blanket treatment for any bacterial disease.

Student B. who was with us claimed there actually is such a substance and that this aspect of Arrowsmith is in essence non-fiction.

Student A. Yes, that's it. And we came over here to get set right about it.

MORE

(Bacteria discussion con'd)

Barney. That must have been a genuine bull session you were attending, many opinions - no authority. But it is certainly true that Arrowsmith was using a real substance, even though it smacks of fiction in its own right. Yes, the bacteriophage is real. Certainly bacteriophagy, the actual destruction or dissolving of visible germs in its presence, is real.

For example, you can mix a heavy cloudy culture of bacteria under certain conditions with a tiny amount of the bacteriophage and the bacteria will disappear and the preparation will become clear and transparent.

Student A. Is there any bacteriophage here in the laboratory?

Barney. Yes. Would you like to see an ampoule of it as supplied to the medical profession . I have some in the laboratory. Let's go in there.

There, - that is the way it is distributed to the medics, or to those of them who use it, for it is still in its experimental stage so far as its use in the cure or prevention of disease is concerned.

Student B. Well, it looks harmless -- nothing more than an amber-colored transparent fluid.

Student A. This box cover says that the ampoule contains ten billion corpuscles of the bacteriophage. If there are that many tiny bodies in that small bottle, I should think the fluid would be anything but transparent.

Student B. Are these corpuscles alive like a microbe or an amoeba?

Barney. Well, Cady , there are different opinions about that. There are some students of the phage who think it is alive and others who believe it may be alive in another sense; those who believe it is alive think that it lives as a parasite of and reproduces only at the expense of a microbe, or that the phage is not a parasite at all, but merely at a stage in the life cycle of a microbe. There are also some who believe that it is not a living substance.

Student A. Why, I should think one could determine easily enough whether it is alive or not.

Barney. Mr. Christian , you are an optimist. First the phage corpuscle, if it is a corpuscle, is so small that it is invisible. Its size is determined to be about twenty millionths of a millimeter. And second, because of this minuteness and certain other difficulties one has trouble bringing it within the scope of the usually accepted criteria of life.

MORE

(Bacteria discussion con'd)

Student B. But if you can't see this phage corpuscle, I can't see how you can tell its size or how the commercial laboratory can accurately state how many corpuscles of it there are present in that bottle. If you can't see it, how can you count it?

Barney. Well, Cady, about its size first. There are filters artificially prepared, according to what you would call a recipe, whose pores are of a certain minute size. If the phage corpuscles pass through such a filter, obviously you know that the corpuscle is smaller than the diameter of the pores of the filter.

Student A. But how do you count these invisible particles, doctor?

Barney. Christian, the specific explanation you desire would require some background in this science, but I may say by way of analogy, that you can't see electricity but you can measure the voltage and amperage of a current. You can't see ultraviolet light but its wave lengths can be measured. It is the same approach here. We can measure the amount of an active substance by what it accomplishes, even though we cannot see the active substance. Accordingly we count the phage corpuscles on the basis of their bacterium-heating ability.

Student A. Can we see, by any chance, a tube or growth that shows the effect of the bacteriophage?

Barney. Yes, I have some plates in the incubator that show how it acts. Just a second.

Here, here is an agar plate which was seeded last night with a mass inoculation of young bacteria. On it was placed right there a drop of germ-free filtered sewage. The filtration of the sewage was done through a stone filter such as those there on the bench. I think you can see that where the drop of filtrate was placed the bacterial growth has failed or has become somewhat glassy in appearance. That is an example of bacteriophagy.

No visible microbe exists in that area. The phage has dissolved them without trace.

Student B. Can the bacteriophage do that to disease producing bacteria in the body? If it could, Doctor, wouldn't we have a panacea for all our germ diseases?

Barney. Yes, we would have. But there is some question about what actually takes place on that plate. Perhaps what some investigators count as death of the bacteria is merely a change from a visible to an invisible form and not death at all.

In any case bacteria vary in their susceptibility to the so-called parasite. Accordingly it appears at the present time to miss by a long

(Bacteria discussion continued - Barney speaking)

Barney ----- In any case bacteria vary in their susceptibility to the so-called parasite. Accordingly it appears at the present time to miss by a long way the mark of being a panacea for man's microbial diseases.

What you gentlemen need, if you are still interested in Dr. Arrowsmith's wonderful cure, is some non-fictional reading on the subject. Herrelle's work on the phage is over there on the shelf. It is technical but it will give you one side of the story. If you want the other, come back and I will provide something.

Student A. Thank you, Doctor, I'd like to take that book along with me.

(end)

Announcer

This is Winter Carnival weekend at Middlebury. The festivities are just starting now with a sports procession across campus to the ski jump on Chipman Hill. It looks like a medieval army with all the skis and poles and snowshoes carried on shoulders, and a blaze of red, blue, orange, white ski suits. Let's listen to the band.

(Rising Eagle by Frank Frank) 3 min.

Announcer (chimes play during this announcement)

As the Broadcasters conclude this series of radio programs, they wish to express their thanks for the scores of suggestions, and letters of appreciation sent in by alumni of many colleges. They regret that they were unable to incorporate more of your ideas into the programs. They have represented for alumni and future freshmen, scenes of college life in sound. If preparatory students care to receive some of the same scenes of college life in picture, The Broadcasters at Middlebury, Vermont would be glad to furnish them. The chapel chimes sound for them a farewell.